

**SOUTHWEST FISHERIES SCIENCE CENTER**  
**THIRD QUARTER REPORT-FY 2003**  
**For the period April 1, 2003 - June 30, 2003**

**SUBMITTED BY:** Norman Bartoo, Acting Director, Fisheries Resources Division

**Title of Accomplishment or Milestone:** Aerial Survey for mackerel, sardines and other pelagic fishes.

**Current Status:** A statement of work and contract specifications has been written up and submitted to WASC for bid.

**Background Information:** Since 1962 the SWFSC has had an aerial survey program that utilizes logbook data from spotter pilots working for commercial fisheries. The data from this program has been used as a measure of relative abundance in population estimates of coastal pelagic species. The spotter pilots collecting data primarily flew assisting purse seine vessels targeting coastal pelagic species. However, in the past several years the pilots have not been flying for these seiners due to the low price paid for pelagic species and decreased fishing effort. The pilots have switched to an alternative fishery.

**Purpose of Activity:** To maintain this relative abundance of coastal pelagic fishes it is necessary to establish a new aerial survey. A more precise and unbiased formal statistical survey design which will continue some aspects of the previous forty years of surveying so that the two data sets can be compared and the historical data set maintains its usefulness and the two surveys can be inter-calibrated.

**Description of Accomplishment and Significant Results:** The contract has been written and is to be advertised for bid. The survey design has been discussed and details are being worked out between researchers at the SWFSC.

**Significance of Accomplishment:** The new survey will permit us to continue using aerial survey data as a measure of relative abundance of coastal pelagic species used in models of population abundance. The new survey design will improve estimates of abundance as it will be fishery independent and designed along statistical methodologies to improve accuracy. In addition, this survey will maintain some aspects of the historical data base so that the importance of forty years of data is not lost.

**Problems:** None

**Contact:** Ron Dotson (858) 546-7085; Rich Charter (858) 546-7157.